



Commandant (G-OPN-3)

U.S. Coast Guard

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USCG Radionavigation



Headquarters - Planning and Policy

- **G-OPN - Program Manager**
- **G-SCE - Electronics Support Manager**
- **G-WTT - Training Manager**

Navigation Center (NAVCEN) & Detachments

- **Operational Control (overall)**
 - **East Coast Control - Alexandria**
 - **West Coast Control - Petaluma**
 - **Alaska Control - Kodiak**





Electronics Support Field Units

- **MLCLANT**
- **MLCPAC**
- **C2CEN**
- **Loran Support Unit**
- **Engineering Logistics Center**

Training Commands

- **Petaluma**
- **Yorktown**



USCG Radionavigation



Services Provided:

- **Maritime DGPS Service**
 - Maritime System
 - Army Corps of Engineers System
- **Nationwide DGPS Expansion**
- **Loran-C**
- **Navigation Information Service**





Maritime DGPS Service

- Full Operational Capability
- March 1999

Army Corps of Engineers sites

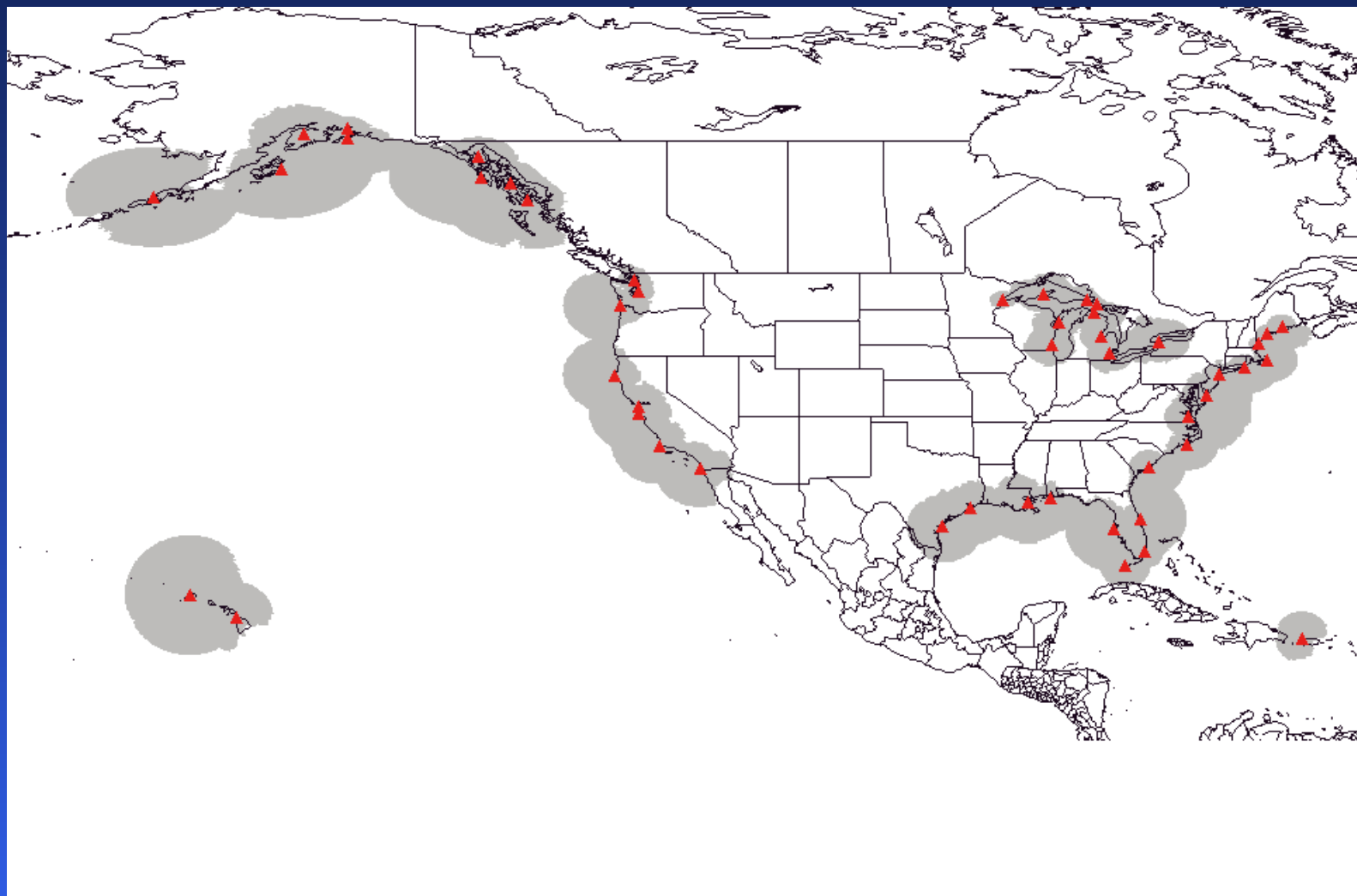
- Full Operational Capability
- March 1999

Continued Improvements

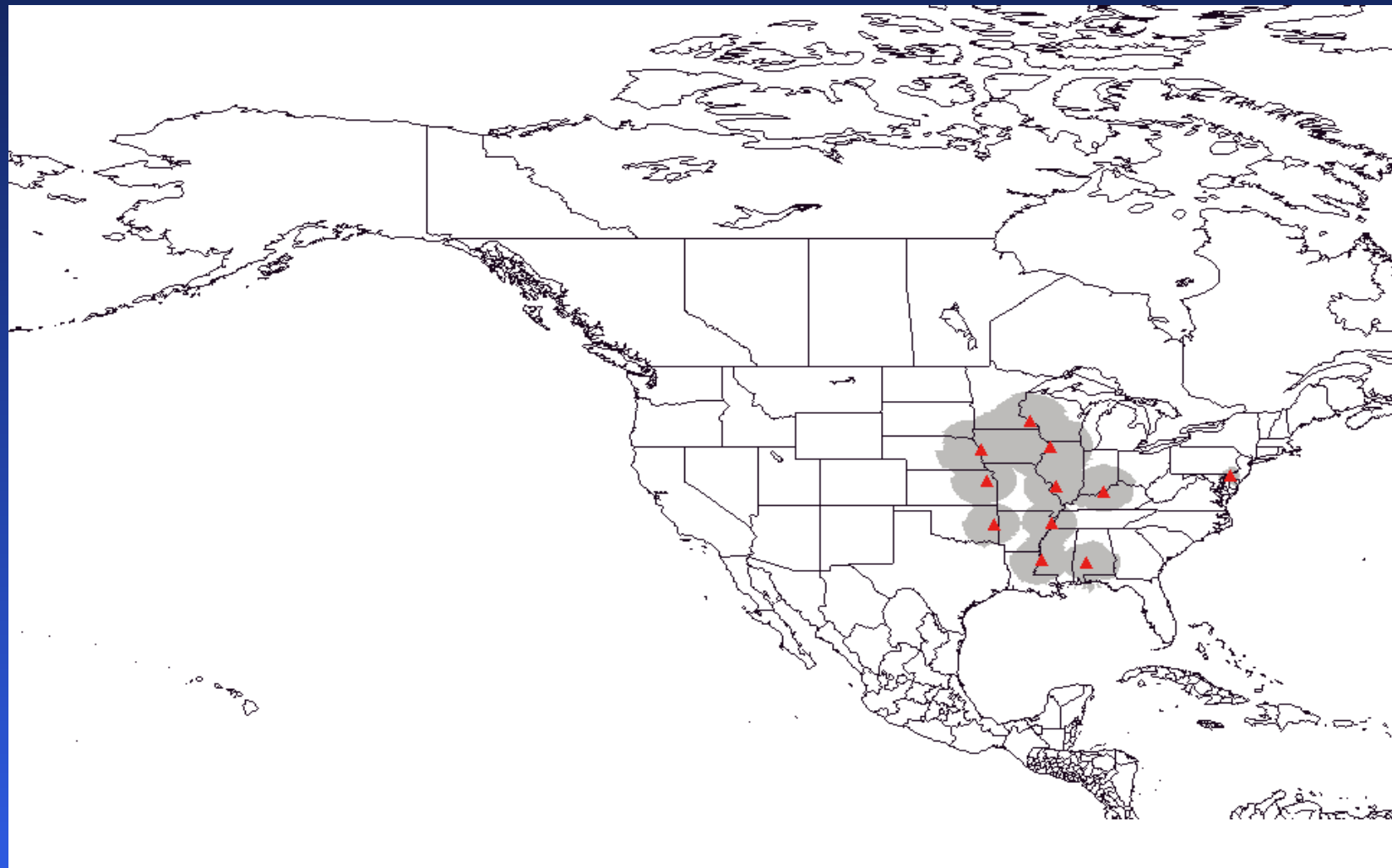
- GSOS Weather Monitoring
- Additional coverage in AK and HI
- Cooperation w/Canada for seamless service



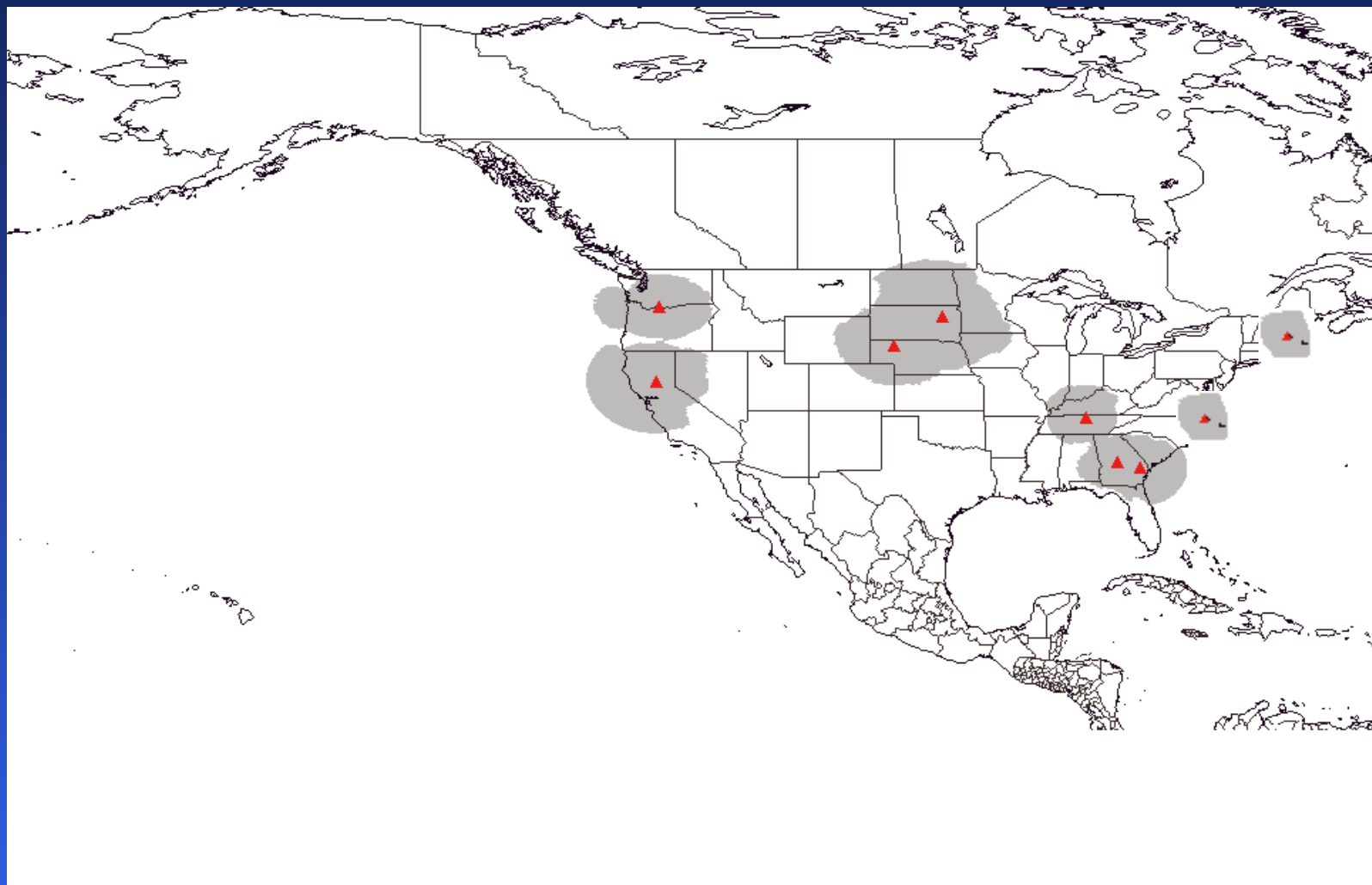
Maritime DGPS



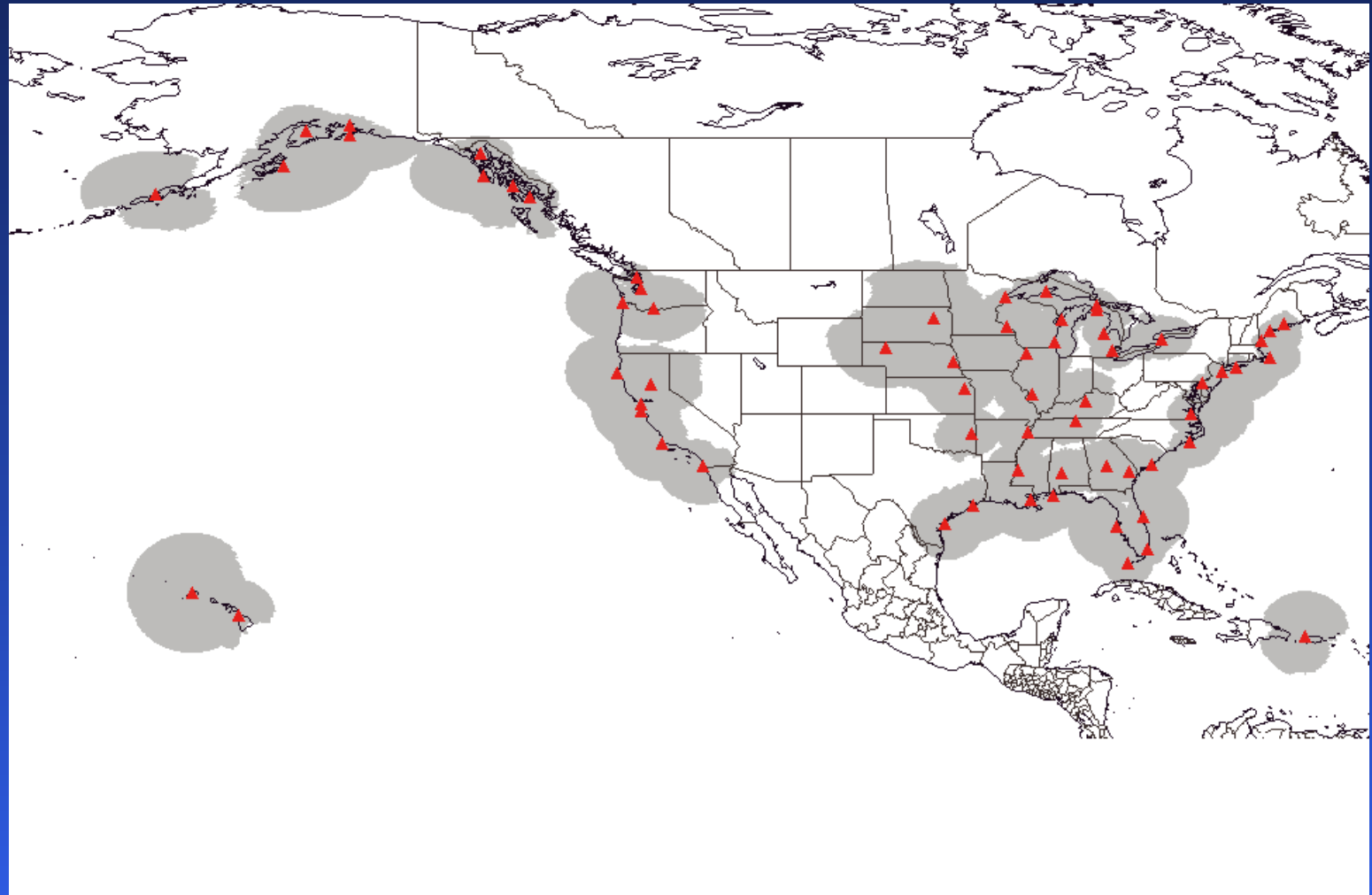
Army Corps of Engineers DGPS



Nationwide DGPS Present



DGPS Today

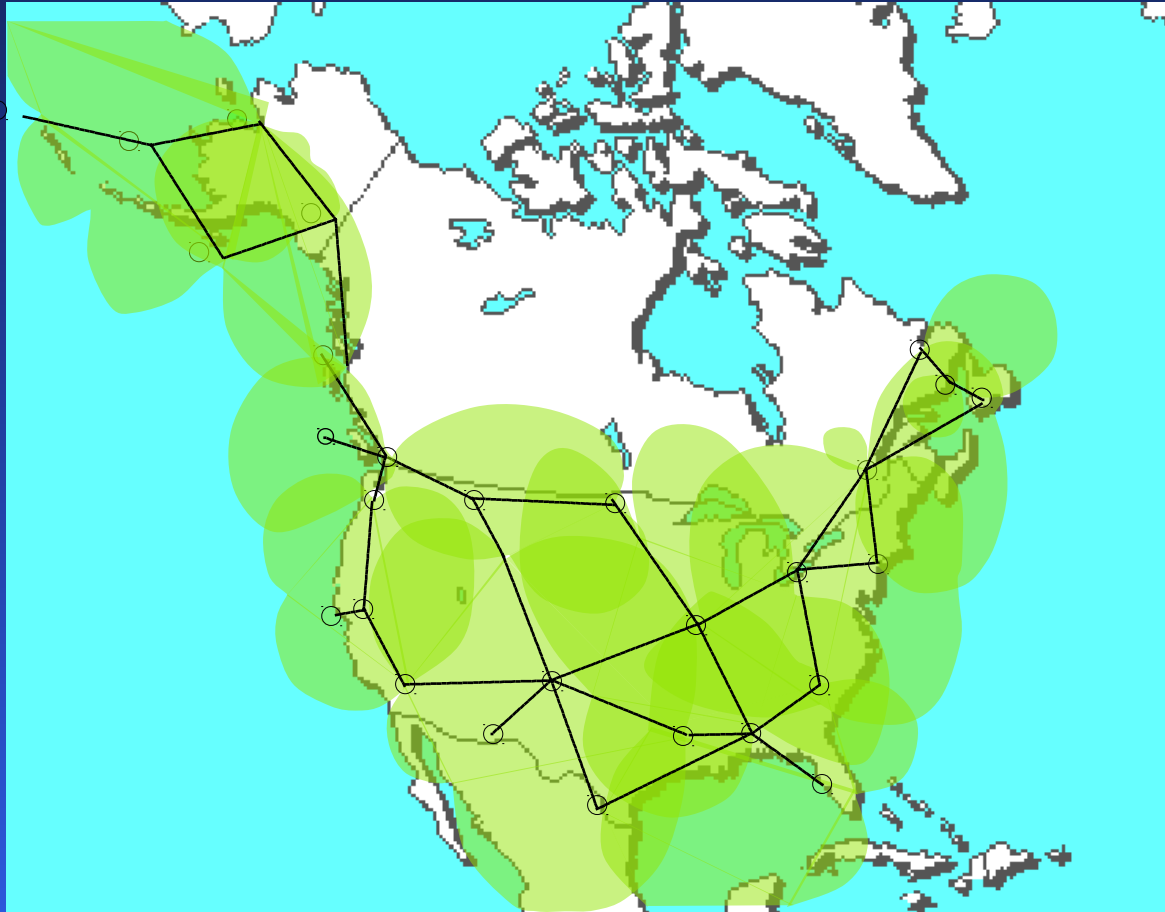




- **Continued operation past the year 2000**
- **Automatic Blink System implementation**
- **Modernization underway**
- **Partnering with FAA on projects/studies**



Loran-C Outlook





Mission Statement

Modernize the U.S. Loran system to meet present and future radionavigation requirements while leveraging technology and funds to optimize operations, support and training, and reduce total cost of ownership.



Loran-C Recapitalization



- **Replace aging, unsupportable equipment**
- **Reduce recurring operating expenses**
- **Increase equipment reliability**
- **Automate & remove Loran station personnel**
- **Explore contracting out support infrastructure**



Loran-C Recapitalization



FY 2000 Goals

- **Procure 1st article solid state transmitter**
- **Install upgraded cesium beam oscillators**
- **Develop prototype timing & control equipment**
- **Initiate SLEP of current solid state xmtrs**



Loran-C Recapitalization

FY 2000 Goals

- **Continue development of Remote Automated Integrated Loran (RAIL)**
- **Design building for new transmitters**
- **Conduct tower life expectancy analysis**
- **Conduct PALS test at LORSTA Jupiter**



Automatic Blink System (ABS) for Aviation

- **Installations completed**
- **Operating in bypass mode awaiting FAA-provided firmware - due May, 2000**
- **To be activated June 2000 following firmware installation**





FAA partnering w/ USCG on Loran studies

- Evaluate prototype H-field aircraft antenna to reduce effects of precipitation static
- Develop FAA TSO-C60B compliant Digital Signal Processing Loran receiver
- Evaluate enhanced Loran comms capability to support GPS and other applications
- Develop hybrid GPS/Loran receiver





**As the operator of Loran and DGPS,
the U.S. Coast Guard continues to
work with:**

- **the Department of Transportation,**
- **the FAA, FRA, and FHWA, and**
- **other federal agencies**
- **to find suitable solutions to the
nation's radionavigation needs**

